

IN THE SPECIFICATION:

Please amend the paragraph as shown on page 10, beginning at line 11, as follows:

In a first scheme for performing the summing of M2 and S2 (Figure 4), output signal M2 of synthesizer 39, which is a digital signal, is converted to an audio signal MA2 by digital to analog converter 42A. Sound sample signal S2 generated by processor 36, which is also a digital signal, is separately converted to an audio signal SA2 by a second digital to analog converter [[43]] 42B. Then audio signals MA2 and SA2 are summed by analog adder 44 to deliver an audio output signal MA3. The analog adder 44 can consist of an operational amplifier mounted in an adder configuration.

Please amend the paragraph as shown on page 11, beginning at line 29, as follows:

In a preferred embodiment of the invention, the invention allows a user to record sound samples with a microphone via commands that permit the user to start and stop a recording. An internal microphone and/or an external microphone input is required. As seen in Figure 9, a microphone 49 provides an output S1A1 connected to the input of preamplifier 51. An analog to digital converter 52 converts the microphone signal S1A1 to digital sample signals [[S12]] S12. The sample signals are read by processor 36 and stored either in its memory 38, or, in the case of the embodiment of Figures 7 and 8, in the memory contained within the synthesizer 39. The memory may be RAM or flash as indicated previously.

Please amend the paragraph as shown on page 13, beginning at line 16, as follows:

According to the functional diagram of Figure 11, the invention can typically be embodied by a module that generates music or other sounds and which comprises essentially processor 36, memory 37 containing the music database of the automatic composition device, musical synthesizer 39, memory 38 storing the sound samples for the musical synthesizer, a digital to analog conversion circuit 43A, a summation circuit 58 and a memory 43, internal or external to the invention, containing a library of digitized musical files. The memory elements 37, 38 and [[42]] 43 can be made of one or several distinct physical components. Processor 36 is able to select, according to certain criteria that are pre-defined or defined by a user, musical files out of

the library in memory [[42]] 43, or is able to compose automatically a melody out of the database stored in memory 37, with an automatic composition algorithm. The output signal S3 of the synthesizer, after digital to analog conversion in converter 43A, delivers an analog signal A3 which can optionally be mixed with the recorded audio A2 or with the external audio input A1 in summation circuit 58 to deliver the mixed complete audio signal S1/S2. This mixed audio signal S1/S2, which forms the output of the invention, can then be used as a sound source at video/audio record time (real time) (S1) or at play back time (time shifted) (S2). As a result prerecording of movie soundtracks, for example, is unnecessary. A simple way is provided for a user to change sound content, pitch, etc. for implementation in a video soundtrack.

Please amend the paragraph as shown on page 14, beginning at line 21, as follows:

According to another feature of the present invention, a device is provided that simulates a radio station including a player of musical pieces, either recorded and digitized or synthesized. According to the functional diagram of Figure 12, a typical embodiment of the invention comprises essentially a processor 36, a memory 37 containing a music database for use by an automatic composition algorithm, a memory 38 storing the sound samples, a musical synthesizer 39, a summation and digital to analog conversion circuit 43B, a radio receiver 64 and a memory [[42]] 43, internal or external to the invention, containing a library of digitized musical files, wherein these elements are interconnected as shown. The memory elements 37, 38 and [[42]] 43 can be made of one component or several physically distinct components. Processor 36 is in communication with the memory elements and is able to select, according to certain criteria, musical files out of the library of musical files or is able to compose automatically, according to the automatic composition algorithm, a melody out of the database stored in memory 37. The automatic composition algorithm also utilizes the sound samples stored in memory 38, which may include some speech sentences, in such a way that processor 36 delivers in synchronism on its outputs a control signal M1 connected to synthesizer 39 and a sound sample control signal S2. Output signal M2 of the synthesizer and sound sample control signal S2 are then summed and converted to analog form in circuit 43A that provides the complete audio signal MA3 for connection to a speaker or speakers (not shown). In a similar way, the output of radio receiver 64 can be mixed upstream, as a digital signal, or downstream, as an analog signal, of circuit 43A

to add a supplementary sound source to the complete audio signal MA3. The audio signal MA3 forms the output of the invention that can then be played by the aforementioned speakers in a stereo system.

Please amend the paragraph as shown on page 15, beginning at line 12, as follows:

In a preferred embodiment of the invention, the processor is made of a microprocessor or microcontroller linked to one or several memories. A RAM memory (volatile memory) can serve as the working memory of the microprocessor and can be used to store the sound samples 38, whereas a ROM or EPROM memory can store the microprocessor program and the music database 37 used by the automatic composition algorithm. However, a greater flexibility will be granted by non-volatile memories: RAM memory saved by a disposable or rechargeable battery, or Flash EEPROM memory (electrically erasable). The non-volatile memory can be used at the very least to store the sound samples in memory 38, so that they are saved when the invention is powered off. It can also be used to store the music database in memory 37 for use by the automatic composition algorithm, the digitized musical files of the library ~~[[42]]~~ 43, as well as a microprocessor operating program. This permits easy update of the music database and the microprocessor operating program by means of downloading updates.

Please amend the paragraph as shown on page 15, beginning at line 24, as follows:

Processor 36 can also be used to select the sound source or sources, including radio receiver 64 or one of the sources in memories 37, 38 and ~~[[42]]~~ 43 described above. It can also be used to select one of a number of preset radio stations, including either actual radio stations or illusory radio stations. Illusory stations in reality play sound samples and musical pieces that have been stored in digital form or that are composed automatically as described herein. Moreover, a sound input device, such as a microphone 66, is useful to input voice signals, encoded in memory, to be used in construction of illusory radio station sound patterns.